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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------------------|-----------------------------|
| 10/043,643 | 01/11/2002 | Gordon Bechtel | D02505 | 5978 |
| 43471 | 7590 | 11/21/2008 | | |
| Motorola, Inc. Law Department 1303 East Algonquin Road 3rd Floor Schaumburg, IL 60196 | | | EXAMINER USTARIS, JOSEPH G | |
| | | | ART UNIT 2424 | PAPER NUMBER |
| | | | NOTIFICATION DATE 11/21/2008 | DELIVERY MODE ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/043,643 | Applicant(s) BECHTEL ET AL. | |
| | Examiner JOSEPH G. USTARIS | Art Unit 2424 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. The objection claim 13 is now withdrawn in view of the amendments.

Applicant's arguments filed September 25, 2008 have been fully considered but they are not persuasive.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant also argues that that multicasting technique doesn't require a PID and would introduce redundancies. However, the examiner respectfully disagrees. The multicast disclosed by Cameron does direct streams to multiple destinations. However, multicast addressing disclosed by Cameron does not identify the packets; it identifies the destination of the packets. The PID does identify the packet and its type as disclosed by Chen (See col. 14 line 56 – col. 15 line 3), but the PID does not identify the destination of the packet. Therefore, PIDs and multicasting addressing would not introduce redundancies because of the different purposes they serve. The PIDs would provide an additional feature that the receiver could use to easily identify packets

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carrying specific service components as disclosed by Chen (See col. 14 lines 57-61).

Furthermore, it is noted that Chen also discloses that the PIDs could be used to for various grooming functions within the system (See col. 14 lines 64-65).

Applicant also argues with KSR reasoning that applicant's use of PIDs is different from what it has been known to perform. However, applicant's use of the PIDs is ultimately for filtering purposes. Filtering based on PIDs (e.g. PID filtering) is well known in the art.

Applicant further argues that Cameron teaches away from the use of a single PID because Cameron's multicasting technique is by itself fully satisfactory to transport and receive different services. The examiner respectfully disagrees. As discussed above, the addition of the PID disclosed by Chen would provide a means of locating specific service components with the packets.

Applicant is reminded that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8, 11, and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cameron et al. (US 20050028206A1) in view of Chen et al. (US005917830A).

Considering claim 1, Cameron et al. (Cameron) discloses a method of providing a virtual file system including application data files to selected set-top terminals within a cable network, each of the selected set-top terminals having one or more client applications residing thereon (paragraph 32-33), the method comprising:

creating a plurality of virtual streams (multicasting) in a single downstream service (Near-video-on-demand, pay-per-view) within a stream set where the virtual streams carry multicast addresses associated with the selected set-top terminals in the cable network (the virtual streams are created and delivered to multiple viewers by using multicast addressed virtual streams which allow one main stream to appear as many multiple virtual streams directed to selected set top boxes with the corresponding multicast addresses, See paragraph 36);

streaming application data files from a data carousel onto one or more of the virtual streams (multicast NVOD and Interactive program guide, See paragraph 36);
and

delivering the stream set to the client application in accordance with delivery criteria set by an API residing on the set-top terminal (networking API installed in the STB, paragraph 39).

Cameron does disclose that the system utilizes the MPEG standard as well as transporting data using packets (See paragraphs 0026-0027). However, Cameron does

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not explicitly disclose that the single downstream service uses a single packet identifier (PID).

Chen et al. (Chen) discloses a system that distributes services using packets. Chen discloses that a single downstream service (e.g. video) uses a single PID (See col. 14 line 56 – col. 15 line 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system disclosed by Cameron to have the single downstream service use a single PID, as taught by Chen, in order to enable receivers to easily identify packets carrying specific service components (See col. 14 lines 57-61).

With respect to claim 2, Cameron discloses a method wherein the delivery criteria includes configuration of the virtual file system across the stream set (protocols configure the IP, NFS and MPEG transmission systems, paragraph 39 line 5-7).

As for claim 3, Cameron discloses the method wherein the configuration comprises partitioning (the system sets up the IP protocols meaning it partitions different streams with different IP addresses paragraph 39).

In regard to claim 4, Cameron discloses a method wherein the delivery criteria include in-band or out-of-band transport criteria (In Fig. 2 the system sends data over the broadband network 26 which means it satisfies the out of band transport criteria alternately, the system also meets the in band criteria since it sends high speed data in combination with low speed telephone signals within the same broadband network paragraph 23).

Dealing with claim 5, Cameron discloses the method wherein the delivery criteria include bandwidth availability on the cable network (Fig. 2, the head-end sends data over a broadband network to a set top box at the user end which means it includes bandwidth availability, paragraph 26 and paragraph 31).

Considering claim 6, Cameron discloses the method wherein the delivery criteria include bit-rate (when the sources are first received by satellite, the bit rate determines the transcoding method at the head-end, paragraph 28).

With respect to claim 7, Cameron discloses the method wherein the stream set carries operations information (the stream sets consist of different downstream services such as NVOD, IPG, e-mail. Information included in the stream set inherently informs the ASDL Modem of what the type of data is being received as well as the destination of the data paragraph 35-36).

Dealing with claim 8, Cameron discloses the method wherein the operations information includes structured information describing the virtual file system (when the user requests a NVOD service, the STB issues a command to the ASDL modem when in turn, issues a command to the head-end, the head-end responds with information on how to obtain the NVOD stream through a multicast address, paragraph 35 and 36).

Considering claim 11, Cameron discloses the method wherein the stream set is MPEG-2 compliant (paragraph 33).

With respect to claim 14, Cameron discloses the method wherein the application data files are streamed according to a file selection algorithm (when the user selects a

data file he or she wishes to view, the head-end inherently uses a file selection algorithm to stream the appropriate file, paragraph 26).

Dealing with claim 15, Cameron discloses the method wherein the file selection algorithm selects files in a virtual directory (the file is selected by the equipment at the head-end where the head-end consists of digital video equipment that gathers, processes, stores and distributes video, paragraph 27-30).

With regard to claim 16, Cameron discloses the method wherein the file selection algorithm selects files that are applicable to time window (the user is provided with an IPG which contains a list of programs that are currently available for the user to watch within the available time window therefore the viewer will not be able to select programs for immediate viewing that are out of the range of the time window therefore the server's selection algorithm selects only the files that are applicable to the time window, paragraph 50).

As for claim 17, Cameron discloses the method wherein the file selection algorithm limits selected files to those which are applicable to a sliding time window (when the TV programs are not available in the sliding time window, they will not be displayed by the IPG paragraph 50).

4. Claims 9 and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Cameron et al. (US 20050028206A1) in view of Chen et al. (US005917830A) as applied to claim 8 above, and further in view of Takahashi (US006633592B1).

In regard to claim 9, Cameron in view of Chen discloses the method wherein the structured information includes an MPEG-2 but does not specifically teach that the MPEG-2 includes PAT.

In an analogous art Takahashi discloses MPEG-2 PAT (column 6 lines 35-55). It would have been obvious to one of ordinary skill in the art to include MPEG-2 PAT, as taught by Takahashi, for the benefit/advantage of using standard MPEG-2 Transport protocol.

As for claim 10, Cameron in view of Chen discloses the method wherein the structured information includes an MPEG-2 but does specifically teach that the MPEG-2 includes PMT.

In an analogous art Takahashi discloses MPEG-2 PMT (column 6 lines 35-55). It would have been obvious to one of ordinary skill in the art to include MPEG-2 PMT as taught by Takahashi, for the benefit/advantage of using standard MPEG-2 Transport protocol.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cameron et al. (US 20050028206A1) in view of Chen et al. (US005917830A) as applied to claim 1 above, and further in view of Rosen et al. (US005745767A).

As for claim 12, Cameron in view of Chen discloses API that are provided to the client application (See Cameron paragraph 39). Cameron in view of Chen does not specifically teach the method wherein the API includes wrapper functions.

However, in an analogous art Rosen discloses a method wherein the API includes wrapper functions (column 35 lines 7-11). It would have been obvious to one of ordinary skill to modify Cameron in view of Chen system to include API that includes wrapper functions, as taught by Rosen, for the benefit/advantage using standard API protocol.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cameron et al. (US 20050028206A1) in view of Chen et al. (US005917830A) and Rosen et al. (US005745767A) as applied to claim 12 above, and further in view of Klein (US006185590B1).

With respect to claim 13, Cameron in view of Chen and Rosen disclose all the limitations of claims 1 and 12 but fail to specifically teach wrapper functions that include a synchronous function-call and response.

However in an analogous art Klein discloses synchronous API (API calls and uses wrapper functions when it interfaces between two devices therefore the function calls are executed in a synchronous manner since API commands are executed in a synchronous manner, column 2 lines 15-16). It would have been obvious to one of ordinary skill in the art to modify the combined systems of Cameron, Chen, and Rosen to include synchronous function-call and response in an API environment, as taught by Klein, for the benefit/advantage of using the standard API functionality.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH G. USTARIS whose telephone number is (571)272-7383. The examiner can normally be reached on M-F 7:30-5 PM; Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph G Ustaris/
Primary Examiner, Art Unit 2424